

MIAMI-DADE COUNTY, FLORIDA METRO-DADE FLAGLER BUILDING 140 WEST FLAGLER STREET, SUITE 1603 MIAMI, FLORIDA 33130-1563 (305) 375-2901 FAX (305) 375-2908

## NOTICE OF ACCEPTANCE (NOA)

ITW, Inc. /Division of Buildex 1349 West Bryn Mawr Ave. Itasca, IL 60143

### Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION: Tapcon Masonry Fasteners.** 

**APPROVAL DOCUMENT:** Drawing No.**01-372**, Sheets 1 of 1, titled "Tapcon Masonry Fasteners" dated 06/22/01with last revision on 08/08/02, prepared by Knezevich & Associates, Inc., signed and sealed by V. J. Knezevich, PE, bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance (NOA) number and expiration date by the Miami-Dade County Product Control Division.

**MISSILE IMPACT RATING: None** 

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 02-0311.03 and, consists of this page 1 as well as approval document mentioned above. The submitted documentation was reviewed by **Theodore Berman**, **P.E.** 



NOA No 03-0114.03 Expiration Date: February 20, 2008 Approval Date: March 13, 2003

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## ITW, Inc. /Division of Buildex

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

(For File ONLY. Not part of NOA)

## A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No.**01-372**, Sheets 1 of 1, titled "Tapcon Masonry Fasteners" dated 06/22/01with last revision on 08/08/02, prepared by Knezevich & Associates, Inc., signed and sealed by V. J. Knezevich, PE.

## B. TESTS

•	Laboratory	Test Report	Date	Signature
01.	Heti 00-4160	ASTM E488	10/25/00	H. M. Medina, PE.
02.	Heti 00-4092	ASTM E488	02/25/00	H. M. Medina, PE.
03.	Heti 00-4153	ASTM E488	10/25/00	H. M. Medina, PE
04.	Heti 00-4072	<b>ASTM E 488</b>	02/25/00	H. M. Medina, PE.
05.	Heti 01-5029	<b>ASTM E.488</b>	05/07/01	H. M. Medina, PE.
06.	Heti 01-5027	ASTM E 488	05/07/01	H. M. Medina, PE
07.	PRI 01078	Protocol PA 114	08/27/01	C. L. Thomas, PE
08.	PRI 01079	Protocol PA 114	08/27/01	C. L. Thomas, PE
09.	ARL 30291	ASTM E488	01/22/02	C. A. Hamon, PE
10.	ARL 30292	ASTM E488	01/29/02	C. A. Hamon, PE
11.	ARL 30299	ASTM E488	01/30/02	C. A. Hamon, PE
12.	ARL 30294	ASTM E488	01/30/02	C. A. Hamon, PE.
13.	Heti 01-C109	ASTM C39	01/16/01	H. M. Medina, PE
14.	MTS 25-7654-PS	Protocol PA 114	06/03/96	H. M. Medina, PE

## C. CALCULATION

1. None

## D. MATERIAL CERTIFICATIONS

1. None

## E. STATEMENTS

1. None

## F. OTHER

1. Notice of Acceptance No. 02-0311.03 ITW, Inc. /Division of Buildex, for their "Tapcon Masonry Fasteners", approved on 9/26/02 and expiring on 2/20/03.

Cievalle German, P.E.

**Deputy Director, Product Control Division** 

NOA No 03-0114.03

Expiration Date: February 20, 2008 Approval Date: March 13, 2003

# **ITW BUILDEX TAPCON**

## DESCRIPTION

ITW BUILDEX TAPCON ANCHORS ARE MANUFACTURED FROM HEAT TREATED STEEL AND HAVE AN ALTERNATING HIGH LOW THREAD FORM. THESE ANCHORS HAVE BEEN TESTED FOR CORROSION RESISTANCE ACCORDING TO PA114.

ITW BUILDEX TAPCON ANCHORS ARE ALSO MANUFACTURED WITH ULTRASHIELD OR WHITE ULTRASHIELD CORROSION RESISTANT COATINGS IN ACCORDANCE WITH ASTM G85 AMD MIAMI-DADE COUNTY PROTOCOL TAS-144, E.

1.) ANCHOR INSTALLATION SHALL BE MADE IN ACCORDANCE WITH ITW BUILDEX PUBLISHED INSTALLATION INSTRUCTIONS IN THE PRODUCT & RESOURCE BOOK AND THIS MIAMI-DADE COUNTY. FLORIDA B.C.C.O. NOTICE OF ACCEPTANCE.

2.) CONCRETE WILL CONFORM TO AMERICAN CONCRETE INSTITUTE MANUAL OF CONCRETE PRACTICE ACI 301.

3.) HOLLOW AND GROUT FILLED CONCRETE BLOCKS SHALL CONFORM

4.) REFERENCE HURRICANE ENGINEERING & TESTING INC. TEST REPORTS:

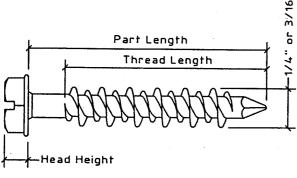
HETI 00 4072 DATED 02/25/00 HETI 00 4153 DATED 10/25/00 HETI 00 4160 DATED 10/25/00 HETI 00 4092 DATED 02/25/00 HETI 01 5027 DATED 05/07/01 HETI 01 5029 DATED 05/07/01,

AND PRI ASPHALT TECHNOLOGIES, INC. TEST REPORTS:

PRI01079 DATED 08/27/01 PRI01078 DATED 08/27/01,

AND APPLIED RESEARCH LABORATORIES TEST REPORTS:

ARL-30291 DATED 01/22/02 ARL-30292 DATED 01/29/02 ARL-30299 DATED 01/30/02 ARL-30294 DATED 01/30/02



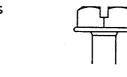
### 3/16" OR 1/4" TAPCON HEAD STYLES

410 STAINLESS STEEL HEAD MARKINGS

CARBON STEEL HEAD MARKINGS



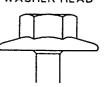




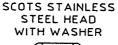


SLOTTED HEX

WASHER HEAD









## 3/16" DIA. TAPCON

1) FOR 3/16" TAPCON, PILOT HOLE DIAMETER SHALL BE 0.171" AND DRILLED 1/4" LONGER THAN THE NECESSARY EMBEDMENT.

2) ALLOWABLE LOADS ARE BASED ON ULTIMATE TEST LOAD DIVIDED BY 4. 3) RECOMMENDED CENTER TO CENTER DISTANCE OF 2-1/4" IS REQUIRED FOR 100 % EFFICIENCY AND 1-1/8" FOR 50% EFFICIENCY.

## 1/4" DIA. TAPCON

1) FOR ALL 1/4" TAPCON, PILOT HOLE DIAMETER SHALL BE 0.200" AND DRILLED 1/4" LONGER THAN THE NECESSARY EMBEDMENT.

2) ALLOWABLE LOADS ARE BASED ON ULTIMATE TEST LOAD DIVIDED BY 4. 3) RECOMMENDED CENTER TO CENTER DISTANCE OF 3" IS REQUIRED FOR 100% EFFICIENCY AND 1-1/2" FOR 50% EFFICIENCY.

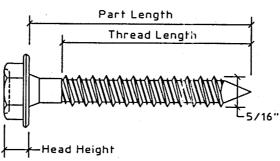
## 5/16" (XL) TAPCON

1) PILOT HOLE DIAMETER SHALL BE 0.263" AND DRILLED 1/4" LONGER THAN THE NECESSARY EMBEDMENT. 2) ALLOWABLE LOADS ARE BASED ON

ULTIMATE TEST LOAD DIVIDED BY 4. 3) RECOMMENDED CENTER TO CENTER DISTANCE OF 3-3/4" IS REQUIRED FOR 100% EFFICIENCY AND 1-7/8" FOR 50% EFFICIENCY.

4) EMBEDMENT IS THROUGH 1-1/4" FACE SHELL OF HOLLOW BLOCK.

5) WOOD BUCK IS LOCATED BETWEEN J CONCRETE AND SIDE MEMBER.



## \_5/16" (XL) TAPCON HEAD STYLES

FLAT HEAD

WASHER HEAD





HEAD



## 1/4" DIAMETER 410 STAINLESS STEEL TAPCON ALLOWABLE LOADS (lbs.)

MIN. 3192 P.S.I. CONCRETE

	EDGE DISTANCE '					
	1	.,	2-1	/2" ′		
MBEDMENT	TENSION	SHEAR	TENSION	SHEAR		
1"	166	148	166	275	,	
1-3/4"	466	189	547	472	,	
	HOLLOW BLOCK					
	EDGE DISTANCE .					

		EDGE D	ISTANCE	•
	1"		2-1/2"	
EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR
1-1/4"	148	107	160	279

## 3/16" DIAMETER **CARBON STEEL TAPCON** ALLOWABLE LOADS (lbs.)

MIN. 3192 P.S.I. CONCRETE

1	EDGE DISTANCE				
	1-1.	/8"	2-5	/8" ·	
EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR	
1"	128	147	128	157	
1-3/4"	354 .	229			
HOLLOW BLOCK					

		EDGE DISTANCE				
,		1-1/8"		2-5	/8"	
•	EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR	
,	1-1/4"	94	112	99	197	

MIN. 3192 P.S.I. CONCRETE

	EDGE DISTANCE					
	4"					
MBEDMENT	TENSION	SHEAR	,			
1-3/4"	487	706	,			
2-1/4"	942	785	,			
HOLLOW BLOCK						

5/16" DIAMETER (XL)

**CARBON STEEL TAPCON** ALLOWABLE LOADS (lbs.)

GROUT FILLED BLOCK

HOLLOW BLOCK				
EDGE DISTANC				
	4			
EMBEDMENT	TENSION	SHEAR		
1-3/4"	261	570		
SEE MOTE /				

## 1/4" DIAMETER **CARBON STEEL TAPCON ALLOWABLE LOADS (lbs.)**

		EDGE DISTANCE				
		1	,,	2-1	/2"	
	EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR	
	1"	209	115	212	297	
	1-3/4"	510	115	575	384	
i						

HOLLOW BLOCK /						
	EDGE DISTANCE '					
	1		2-1	/2" -		
EMBEDMENT	TENSION	SHEAR	TENSION	SHEAR		
1-1/4"	117	94	195	264		

# PRODUCT RENEWED as complying with the Florida

## **Buiding Code** Acceptance No 03-0114.03 Expiration Date 02 / 20 108

By Clevelre Miami Dade Product Control Division BUTTON

## 5/16" DIAMETER (XL) CARBON STEEL TAPCON **ALLOWABLE LOADS (lbs.)**

## MIN. 2899 P.S.I. CONCRETE '

	EDGE DISTANCE					
1-9/16"		1-9/16" 2-3/16"		/16"	3-1/8"	
TENSION	SHEAR	TENSION	SHEAR	TENSION	SHEAR	
262	333	301	431	301	543	
505	382	563	626	583	627	
713	489	780	812	788	852	
	TENSION 262 505	TENSION SHEAR 262 333 505 382	1-9/16" 2-3. TENSION SHEAR TENSION 262 333 301 505 382 563	1-9/16" 2-3/16" TENSION SHEAR TENSION SHEAR 262 333 301 431 505 382 563 626	1-9/16" 2-3/16" 3-1 TENSION SHEAR TENSION SHEAR TENSION 262 333 301 431 301 505 382 563 626 583	

## 5/16" DIAMETER (XL) **CARBON STEEL TAPCON** ALLOWABLE LOADS (lbs.)

### 2 x WOOD BUCK (G=0.36)

EMBEDMENT INTO 3000 P.S.I. CONCRETE	EDGE DISTANCE
	1-3/4"
	SHEAR
1-3/4"	. 312
SEE MOTE E	

## PRODUCT REVISED

as complying with the Florida Buiding Code Acreptance Iva 02-0311103 Expiration Linta 02/20/03

Miami Dade Product Control Division



OCIATES, IN SS

KNEZEVICH CONSULTING ENG 1260 N. UNIVERSITY DRIVE, TEL: (954) 382-2800 - FA WEISTE: WWW.JONEEN

**TAPCON MASONRY FASTENERS** dex 

VJ. KNEZEVICH PROPESSIONAL ENGINEER PL. Lichiga No. PE.0010901 AUG 0 9 200

1 08/7 2 09/7 3 03/0 5 06/7

06/22/01

drawn by AS NOTED

01-372

sheet 1 of 1